

[illegible]

[illegible]

```
1 0001 0 MODULE RPGSEXT_INDS( %TITLE 'Read external RPGII indicators'
2 0002 0 IDENT = '1-003' ! file: RPGEXTIND.B32 EDIT:DG1003
3 0003 0 ) =
4 0004 1 BEGIN
5 0005 1
6 0006 1 *****
7 0007 1 *
8 0008 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
9 0009 1 * DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
10 0010 1 * ALL RIGHTS RESERVED.
11 0011 1 *
12 0012 1 * THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
13 0013 1 * ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
14 0014 1 * INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
15 0015 1 * COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
16 0016 1 * OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
17 0017 1 * TRANSFERRED.
18 0018 1 *
19 0019 1 * THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
20 0020 1 * AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
21 0021 1 * CORPORATION.
22 0022 1 *
23 0023 1 * DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
24 0024 1 * SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
25 0025 1 *
26 0026 1 *
27 0027 1 *****
28 0028 1
29 0029 1
30 0030 1
31 0031 1 ++
32 0032 1 FACILITY: RPGII SUPPORT
33 0033 1
34 0034 1 ABSTRACT
35 0035 1
36 0036 1 This routine reads external RPGII indicators.
37 0037 1
38 0038 1
39 0039 1 ENVIRONMENT: Vax-11 User Mode
40 0040 1
41 0041 1 AUTHOR: Debess Grabazs, CREATION DATE: 1-FEB-1983
42 0042 1
43 0043 1 MODIFIED BY:
44 0044 1
45 0045 1 1-001 - Original. DG 1-FEB-1983
46 0046 1 1-002 - Take out %ASCID - was making code unsharable. DG 11-Jul-1983
47 0047 1 1-003 - Change dynamic string to static. DG 15-May-1984
48 0048 1 --
49 0049 1
50 0050 1 !<BLF/PAGE>
```



RPG\$EXT\_INDS  
1-003

Read external RPGII indicators  
Declarations

I 13  
16-Sep-1984 02:14:55  
14-Sep-1984 13:04:18

VAX-11 Bliss-32 V4.0-742  
[RPGRTL.SRC]RPGEXTIND.B32;1

Page 2  
(2)

```

52 0051 1 %SBTTL 'Declarations'
53 0052 1 |
54 0053 1 | PROLOGUE FILE:
55 0054 1 |
56 0055 1 |
57 0056 1 REQUIRE 'RTLIN:RPGPROLOG';
58 0121 1 |
59 0122 1 |
60 0123 1 |
61 0124 1 | LINKAGES
62 0125 1 | NONE
63 0126 1 |
64 0127 1 |
65 0128 1 |
66 0129 1 | TABLE OF CONTENTS:
67 0130 1 |
68 0131 1 |
69 0132 1 FORWARD ROUTINE
70 0133 1 RPG$EXT_INDS;
71 0134 1 |
72 0135 1 |
73 0136 1 | INCLUDE FILES
74 0137 1 | NONE
75 0138 1 |
76 0139 1 |
77 0140 1 |
78 0141 1 | MACROS
79 0142 1 | NONE
80 0143 1 |
81 0144 1 |
82 0145 1 |
83 0146 1 | EQUATED SYMBOLS
84 0147 1 | NONE
85 0148 1 |
86 0149 1 |
87 0150 1 |
88 0151 1 | EXTERNAL REFERENCES
89 0152 1 |
90 0153 1 |
91 0154 1 EXTERNAL ROUTINE
92 0155 1 LIB$STOP,
93 0156 1 OT$SCVT_L_TI;
94 0157 1 |
95 0158 1 EXTERNAL LITERAL
96 0159 1 RPG$_FATINTERR,
97 0160 1 RPG$_INVARG;
98 0161 1 |

! Switches, PSECTs, macros,
! Linkages and LIBRARYs

! Stop execution via signalling
! Convert longword to text

! Fatal internal error
! Invalid argument
```

RPG\$EXT\_INDS  
1-003

Read external RPGII indicators  
RPG\$EXT\_INDS - Read external RPGII indicators

J 13  
16-Sep-1984 02:14:55  
14-Sep-1984 13:04:18

VAX-11 Bliss-32 V4.0-742  
[RPGRTL.SRC]RPG\$EXTIND.B32;1

Page 3  
(3)

```

: 100 0162 1 %SBTTL 'RPG$EXT_INDS - Read external RPGII indicators'
: 101 0163 1 GLOBAL ROUTINE RPG$EXT_INDS(
: 102 0164 1     NUMBER                                ! Indicator number
: 103 0165 1     ) =
: 104 0166 1 ++
: 105 0167 1
: 106 0168 1 FUNCTIONAL DESCRIPTION:
: 107 0169 1
: 108 0170 1     The logical name RPG$EXT_INDS can be assigned to an
: 109 0171 1     indicator list of up to eight RPGII external indicators.
: 110 0172 1     An indicator is set ON by specifying it in the RPG$EXT_INDS
: 111 0173 1     indicator list. This routine accepts the number of a
: 112 0174 1     particular indicator as its input parameter. It then checks
: 113 0175 1     the indicator list for a match. If the indicator is present
: 114 0176 1     in the list, the routine returns a value of 1; otherwise it
: 115 0177 1     returns 0.
: 116 0178 1
: 117 0179 1 CALLING SEQUENCE
: 118 0180 1
: 119 0181 1     indicator_value.wlc.v = RPG$EXT_INDS (number.rl.v)
: 120 0182 1
: 121 0183 1 FORMAL PARAMETERS:
: 122 0184 1
: 123 0185 1     number                indicator number
: 124 0186 1
: 125 0187 1 IMPLICIT INPUTS:
: 126 0188 1
: 127 0189 1     RPG$EXT_INDS - logical name which may be assigned to
: 128 0190 1     an indicator list of up to eight RPGII
: 129 0191 1     external indicators
: 130 0192 1
: 131 0193 1 IMPLICIT OUTPUTS:
: 132 0194 1
: 133 0195 1     NONE
: 134 0196 1
: 135 0197 1 RETURN VALUE:
: 136 0198 1
: 137 0199 1     SWITCH_VALUE - 1 means indicator is ON
: 138 0200 1     0 means indicator is OFF
: 139 0201 1
: 140 0202 1 SIDE EFFECTS:
: 141 0203 1
: 142 0204 1     NONE
: 143 0205 1
: 144 0206 1 --
: 145 0207 1
: 146 0208 1
: 147 0209 1 !<BLF/PAGE>
```

RPG\$EXT\_INDS  
1-003

Read external RPGII indicators  
RPG\$EXT\_INDS - Read external RPGII indicators

K 13  
16-Sep-1984 02:14:55  
14-Sep-1984 13:04:18

VAX-11 Bliss-32 V4.0-742  
[RPGRTL.SRC]RPG\$EXTIND.B32;1

Page 4  
(4)

```
149 0210 1
150 0211 2
151 0212 3
152 0213 4
153 0214 5
154 0215 6
155 0216 7
156 0217 8
157 0218 9
158 0219 10
159 0220 11
160 0221 12
161 0222 13
162 0223 14
163 0224 15
164 0225 16
165 0226 17
166 0227 18
167 0228 19
168 0229 20
169 0230 21
170 0231 22
171 0232 23
172 0233 24
173 0234 25
174 0235 26
175 0236 27
176 0237 28
177 0238 29
178 0239 30
179 0240 31
180 0241 32
181 0242 33
182 0243 34
183 0244 35
184 0245 36
185 0246 37
186 0247 38
187 0248 39
188 0249 40
189 0250 41
190 0251 42
191 0252 43
192 0253 44
193 P 0254 45
194 0255 46
195 0256 47
196 0257 48
197 0258 49
198 0259 50
199 0260 51
200 0261 52
201 0262 53
202 0263 54
203 0264 55
204 0265 56
205 0266 57

BEGIN
LITERAL
    MIN_INDICATOR = 1,
    MAX_INDICATOR = 8,
    ON             = 1,
    OFF            = 0;

LOCAL
    DEST_DESC: BLOCK[8,BYTE],      ! Local desc for call to $TRNLOG
    LOG_DESC: BLOCK[8,BYTE],      ! Local desc for call to $TRNLOG
    NAME_LENGTH,                  ! Length of logical name string
    NAME_TEXT: VECTOR [LNM$C_NAMLENGTH, BYTE]; ! Local string for logical name

!+
!-
    Make sure input parameter is in acceptable range.
!-
IF .NUMBER LSS MIN_INDICATOR OR .NUMBER GTR MAX_INDICATOR
THEN LIB$STOP (RPG$INVARG);

!+
!-
    Initialize descriptors for call to $TRNLOG.
!-
DEST_DESC[DSC$W_LENGTH] = LNM$C_NAMLENGTH;
DEST_DESC[DSC$B_CLASS] = DSC$K_CLASS_S;
DEST_DESC[DSC$B_DTYPE] = DSC$K_DTYPE_T;
DEST_DESC[DSC$A_POINTER] = NAME_TEXT;

LOG_DESC[DSC$W_LENGTH] = %CHARCOUNT ('RPG$EXT_INDS');
LOG_DESC[DSC$B_CLASS] = DSC$K_CLASS_S;
LOG_DESC[DSC$B_DTYPE] = DSC$K_DTYPE_T;
LOG_DESC[DSC$A_POINTER] = UPLIT ('RPG$EXT_INDS');

!+
!-
    Try to translate the logical name RPG$EXT_INDS.
!-
IF ($TRNLOG (LOGNAM = LOG_DESC, RSLLEN = NAME_LENGTH,
            RSLBUF = DEST_DESC)) EQL SS$NORMAL
THEN
!+
!-
    Logical name translated - see if requested indicator
    is set or not
!-
BEGIN
LOCAL
    NUM_STR: BLOCK[8,BYTE],      ! Local desc for call to OTSS$CVT_L_TI
```



RPG\$EXT\_INDS  
1-003

Read external RPGII indicators  
RPG\$EXT\_INDS - Read external RPGII indicators

L 13

16-Sep-1984 02:14:55  
14-Sep-1984 13:04:18

VAX-11 Bliss-32 V4.0-742  
[RPGRTL.SRC]RPGEXTIND.B32;1

Page 5  
(4)

```

206      0267      NUM_STR TEXT: INITIAL (%C'n');      ! Local string for converted number
207      0268      NUM_STR[DSCSW_LENGTH] = %CHARCOUNT ('n');
208      0269      NUM_STR[DSCSB_CLASS] = DSCSK_CLASS_S;      ! Initialize descriptor for
209      0270      NUM_STR[DSCSB_DTYPE] = DSCSK_DTYPE-T;      ! conversion
210      0271      NUM_STR[DSCSA_POINTER] = NUM_STR TEXT;
211      0272      IF NOT (OTSSCVT_L_TI (NUMBER, NUM_STR)) ! Convert input number to string
212      0273      THEN
213      0274      LIB$STOP (RPG$ FATINTERR);
214      0275      IF CH$FAIL (CH$FIND_CH (.NAME_LENGTH, NAME_TEXT, .NUM_STR_TEXT))
215      0276      THEN
216      0277      RETURN OFF
217      0278      ELSE
218      0279      RETURN ON;
219      0280
220      0281      END
221      0282      ELSE
222      0283      +
223      0284      Logical name did not translate - return 0.
224      0285
225      0286      -
226      0287      RETURN OFF;
227      0288
228      0289
229      0290      1
END;
```

.TITLE RPG\$EXT\_INDS Read external RPGII indicators  
.IDENT \1-003\

.PSECT \_RPG\$CODE,NOWRT, SHR, PIC,2

53 44 4E 49 5F 54 58 45 24 47 50 52 00000 P.AAA:

.ASCII \RPG\$EXT\_INDS\ ;

.EXTRN LIB\$STOP, OTSSCVT\_L\_TI  
.EXTRN RPG\$ FATINTERR, RPG\$ INVARG  
.EXTRN SYS\$TRNLOG

```

52 00000000G 00 0004 00000
5E FEE0 CE 9E 00002
04 AC D5 0000E
06 15 00011
08 04 AC D1 00013
09 15 00017
00000000G 8F DD 00019 1$:
62 01 FB 0001F
F8 AD 010E00FF 8F D0 00022 2$:
FC AD 10 AE 9E 0002A
F0 AD 010E000C 8F D0 0002F
F4 AD BA AF 9E 00037
7E 7C 0003C
7E D4 0003E
F8 AD 9F 00040
10 AE 9F 00043
F0 AD 9F 00046
00000000G 00 06 FB 00049
01 50 D1 00050
```

```

.ENTRY RPG$EXT_INDS, Save R2      : 0163
MOVAB LIB$STOP, R2
MOVAB -288(SP), SP
TSTL NUMBER      : 0231
BLEQ 1$
CMPL NUMBER, #8
BLEQ 2$
PUSHL #RPG$ INVARG      : 0232
CALLS #1, LIB$STOP
MOVL #17694975, DEST_DESC      : 0239
MOVAB NAME_TEXT, DEST_DESC+4    : 0242
MOVL #17694732, LOG_DESC        : 0244
MOVAB P.AAA, LOG_DESC+4         : 0247
CLRQ -(SP)      : 0255
CLRL -(SP)
PUSHAB DEST_DESC
PUSHAB NAME_LENGTH
PUSHAB LOG_DESC
CALLS #6, SYS$TRNLOG
CMPL R0, #1
```

RPG\$EXT\_INDS  
1-003

Read external RPGII indicators  
RPG\$EXT\_INDS - Read external RPGII indicators

M 13  
16-Sep-1984 02:14:55  
14-Sep-1984 13:04:18

VAX-11 Bliss-32 V4.0-742  
[RPGR TL.SRC]RPGEXTIND.B32;1

Page 6  
(4)

04	AE	6E	3D	12	00053	BNEQ	5\$		
08	AE	010E0001	8F	9A	00055	MOVZBL	#110, NUM_STR_TEXT		0263
0C	AE	04	8F	D0	0005A	MOVL	#17694721, NUM_STR		0268
		08	AE	9E	00062	MOVAB	NUM_STR_TEXT, NUM_STR+4		0271
		04	AE	9F	00067	PUSHAB	NUM_STR		0272
			AC	9F	0006A	PUSHAB	NUMBER		
00000000G	00		02	FB	0006D	CALLS	#2, OTSS\$CVT_L_TI		
	09		50	E8	C0074	BLBS	R0, 3\$		
		00000000G	8F	DD	00077	PUSHL	#RPG\$ FATINTERR		0274
	62		01	FB	0007D	CALLS	#1, LIB\$STOP		
10 AE	6E	04	AE	3A	00080	LOCC	NUM_STR_TEXT, NAME_LENGTH, NAME_TEXT		0275
			02	12	00086	BNEQ	4\$		
			51	D4	00088	CLRL	R1		
			51	D5	0008A	TSTL	R1		
			04	13	0008C	BEQL	5\$		
	50		01	D0	0008E	MOVL	#1, R0		0279
				04	00091	RET			0288
			50	D4	00092	CLRL	R0		
			04	00094	RET				0290

; Routine Size: 149 bytes, Routine Base: \_RPG\$CODE + 000C

: 230 0291 1  
: 231 0292 0 END ELUDOM

#### PSECT SUMMARY

Name	Bytes	Attributes
_RPG\$CODE	161	NOVEC, NOWRT, RD, EXE, SHR, LCL, REL, CON, PIC, ALIGN(2)

#### Library Statistics

File	----- Total	Symbols Loaded	----- Percent	Pages Mapped	Processing Time
\$255\$DUA28:[SYSLIB]STARLET.L32;1	9776	11	0	581	00:01.0
\$255\$DUA28:[RPGR TL.OBJ]RPGLIB.L32;1	54	0	0	9	00:00.1

#### COMMAND QUALIFIERS

: BLISS/CHECK=(FIELD, INITIAL, OPTIMIZE)/NOTRACE/LIS=LIS\$:RPGEXTIND/OBJ=OBJ\$:RPGEXTIND MSRC\$:RPGEXTIND/UPDATE=(ENH\$:RPGEXTIND



RPG\$EXT\_INDS  
1-003

Read external RPGII indicators  
RPG\$EXT\_INDS - Read external RPGII indicators

N 13  
16-Sep-1984 02:14:55  
14-Sep-1984 13:04:18

VAX-11 Bliss-32 V4.0-742  
[RPGRTL.SRC]RPGEXTIND.B32;1

Page 7  
(4)

: )

: Size: 149 code + 12 data bytes  
: Run Time: 00:05.1  
: Elapsed Time: 00:19.0  
: Lines/CPU Min: 3448  
: Lexemes/CPU-Min: 13263  
: Memory Used: 62 pages  
: Compilation Complete



0331

AH-BT13A-SE  
VAX/VMS V4.0

DIGITAL EQUIPMENT CORPORATION  
CONFIDENTIAL AND PROPRIETARY